CLAIMS

1. A social infrastructure operation apparatus used in a social infrastructure operation system including a monitor which monitors an infrastructure, and configured to operate the infrastructure based on a relationship with a predetermined area or region including the infrastructure, the social infrastructure operation apparatus comprising:

an infrastructure information storage module which stores infrastructure information on the infrastructure acquired from the monitor regarding the predetermined area or region;

a key performance indicator calculator which calculates a key performance indicator regarding the predetermined area or region based on inhabitant information relating to the predetermined area or region, and the infrastructure information relating to management of the predetermined area or region; and

a key performance indicator storage module which stores the key performance indicator calculated by the key performance indicator calculator.

2. A social infrastructure operation apparatus as recited in claim 1,

wherein the key performance indicator calculator calculates a key performance indicator from the key performance indicator stored in the key performance indicator storage module based on an index given by an input module which deals with the management of the predetermined area or region.

3. A social infrastructure operation apparatus as recited in either of claims 1 or 2, further comprising:

an infrastructure information receiver which receives infrastructure information on the infrastructure acquired from the monitor regarding the predetermined area or region and wherein

the infrastructure information storage module stores the infrastructure information received by the infrastructure information receiver.

4. A social infrastructure operation apparatus as recited in any preceding claim further comprising:

an inhabitant information storage module which stores inhabitant information relating to the predetermined area or region and unique to the inhabitant wherein the key performance indicator calculator is configured to calculate a key performance indicator for the predetermined area or region based on the infrastructure information stored in the infrastructure information storage module and the inhabitant information stored in the inhabitant information storage module.

5. A social infrastructure operation apparatus as recited in claim 3, further comprising:

an inhabitant information acquisition module which acquires the inhabitant information from the inhabitant information storage apparatus; and

an inhabitant information storage module which stores the inhabitant information acquired by the inhabitant information acquisition module wherein

the key performance indicator calculator is configured to calculate a key performance indicator for the predetermined area or region based on the infrastructure information stored in the infrastructure information

storage module and the inhabitant information stored in the inhabitant information storage module.

6. A social infrastructure operation apparatus according to any preceding claim, wherein the monitor is locally provided and connected to the key performance indicator calculator via a communications network.

7. An information processing method performed by a social infrastructure operation apparatus used in a social infrastructure operation system including a monitor which monitors an infrastructure, and configured to operate the infrastructure based on a relationship with a predetermined area or region including the infrastructure, the method comprising:

storing in an infrastructure information storage module infrastructure information on the infrastructure acquired from the measurement apparatus regarding the predetermined area or region;

calculating a key performance indicator regarding the predetermined area or region based on inhabitant information relating to the predetermined area or region, and the infrastructure information relating to management of the predetermined area or region; and

storing the calculated key performance indicator in a key performance indicator storage module.

8. An information processing method as recited in claim 7, wherein the calculating comprises calculating a key performance indicator from the key performance indicator stored in the key performance indicator storage module based on an index given by an input module which

deals with the management of the predetermined area or region.

9. An information processing method as recited in claim 7 or 8,

further comprising:

receiving infrastructure information on the infrastructure acquired from the monitor regarding the predetermined area or region; and

storing the infrastructure information received in the infrastructure information storage module.

10. An information processing method as recited in any of claims 7 to 9, further comprising:

storing in an inhabitant information storage module inhabitant information relating to the predetermined area or region and unique to the inhabitant and wherein

calculating a key performance indicator for the predetermined area or region is based on the infrastructure information stored in the infrastructure information storage module and the inhabitant information stored in the inhabitant information storage module.

11. An information processing method as recited in any of claims 7 to 10, wherein the social infrastructure operation apparatus further includes an inhabitant information storage apparatus which stores inhabitant information relating to a predetermined area or region and unique to the inhabitant, the method comprising:

receiving infrastructure information on the infrastructure acquired from the monitor regarding the predetermined area or region;

acquiring the inhabitant information from the inhabitant information storage apparatus;

storing the acquired inhabitant information in an inhabitant information storage module; and

wherein calculating a key performance indicator for the predetermined area or region is based on the infrastructure information stored in the infrastructure information storage module and the inhabitant information stored in the inhabitant information storage module.

12. A program executed by a social infrastructure operation apparatus used in a social infrastructure operation system including a monitor which monitors an infrastructure, and configured to operate the infrastructure based on a relationship with a predetermined area or region including the infrastructure, the program causing the social infrastructure operation apparatus to perform the method of any of claims 7 to 11.

C L A I M S

1. An information integration control system comprising:

a collector configured to collect infrastructure information concerning a social infrastructure, user information about a user who uses the social infrastructure, and management information of a manager who manages the social infrastructure and the user;

a storage module configured to store the infrastructure information, the user information, and the management information which are collected; and

a generator configured to generate control information for the social infrastructure based on the infrastructure information, the user information, and the management information which are stored in the storage module.

2. The information integration control system of claim 1, further comprising:

a calculator configured to calculate a key performance indicator based on the pieces of information stored in the storage module; and

an instruction creator configured to create at least one of instruction information for the social infrastructure, user instruction information for the user, and manager instruction information for the manager based on the key performance indicator.

3. The information integration control system of

claim 1, wherein the storage module comprises a key-value store database configured to store collected information as a pair of a key to identify the information and a value corresponding to the key.

4. The information integration control system of claim 1, wherein the calculator is implemented in a cloud computing system.

5. The information integration control system of claim 1, wherein the storage module converts the infrastructure information into an intermediate value comparable between a plurality of social infrastructures and stores the intermediate value.

6. The information integration control system of claim 1, further comprising a display optimizer configured to convert the key performance indicator into a format suitable for display.

7. An information processing program to be executed by a computer, the program causing the computer to:

collect infrastructure information concerning a social infrastructure, user information about a user who uses the social infrastructure, and management information of a manager who manages the social infrastructure and the user;

store, in a storage module, the infrastructure information, the user information, and the management information which are collected; and

generate control information for the social infrastructure based on the infrastructure information, the user information, and the management information which are stored in the storage module.

8. A social infrastructure operation system comprising:

a local apparatus provided in a social infrastructure; and

a server apparatus connected to the local apparatus via a communication network,

the local apparatus comprising

an uploader configured to upload infrastructure information concerning the social infrastructure to the server apparatus via the communication network, and

a receiver configured to receive an operation plan of the social infrastructure from the server apparatus, and

the server apparatus comprising

an acquisition module configured to acquire the infrastructure information from the local apparatus via the communication network,

a collector configured to collect, via the communication network, inhabitant information of an inhabitant in a region the social infrastructure concerns,

a database configured to accumulate the acquired infrastructure information and the collected inhabitant

information,

a plan creator configured to create the operation plan based on the infrastructure information and the inhabitant information which are accumulated in the database, and

a transmitter configured to transmit the created operation plan to the local apparatus.

9. The social infrastructure operation system of claim 8, wherein the inhabitant information includes information managed by a municipality in the region.

10. The social infrastructure operation system of claim 8, wherein the inhabitant information includes information concerning an electrical device installed in an inhabitant home.

11. The social infrastructure operation system of claim 8, wherein

the server apparatus further comprises a calculator configured to calculate a key performance indicator based on the infrastructure information and the inhabitant information which are accumulated in the database, and

the plan creator creates the operation plan based on the calculated key performance indicator.

12. The social infrastructure operation system of claim 8, wherein

the server apparatus further comprises a converter configured to convert the acquired infrastructure

information into an intermediate value comparable between a plurality of different types of social infrastructures,

the database accumulates the infrastructure information converted into the intermediate value, and

the plan creator creates the operation plan for each of the plurality of social infrastructures based on the intermediate value.

13. The social infrastructure operation system of claim 8, wherein the server apparatus is provided in a cloud computing system comprising the database.

14. An operation method applicable to a social infrastructure operation system comprising a local apparatus provided in a social infrastructure, and a server apparatus connected to the local apparatus via a communication network, the method comprising:

in the local apparatus,

uploading infrastructure information concerning the social infrastructure to the server apparatus via the communication network; and

receiving an operation plan of the social infrastructure from the server apparatus, and

in the server apparatus,

acquiring the infrastructure information via the communication network;

collecting, via the communication network, inhabitant information of an inhabitant in a region the

social infrastructure concerns;

accumulating the acquired infrastructure information and the collected inhabitant information in a database;

creating the operation plan based on the infrastructure information and the inhabitant information which are accumulated in the database; and

transmitting the created operation plan to the local apparatus.

15. The operation method of claim 14, wherein the inhabitant information includes information managed by a municipality in the region.

16. The operation method of claim 14, wherein the inhabitant information includes information concerning an electrical device installed in an inhabitant home.

17. The operation method of claim 14, wherein

the server apparatus further calculates a key performance indicator based on the infrastructure information and the inhabitant information which are accumulated in the database, and

in the creating, the operation plan is created based on the calculated key performance indicator.

18. The operation method of claim 14, wherein

the server apparatus further converts the acquired infrastructure information into an intermediate value comparable between a plurality of different types of social infrastructures,

in the creating, the operation plan for each of the plurality of social infrastructures is created based on the intermediate value.

19. A local apparatus provided in a social infrastructure, comprising:

an uploader configured to upload, via a communication network, infrastructure information concerning the social infrastructure to a server apparatus connected via the communication network;

a transmitter configured to transmit inhabitant information of an inhabitant in a region the social infrastructure concerns to the server apparatus via the communication network; and

a receiver configured to receive an operation plan of the social infrastructure from the server apparatus.

20. A server apparatus connected, via a communication network, to a local apparatus provided in a social infrastructure, comprising:

an acquisition module configured to acquire infrastructure information concerning the social infrastructure from the local apparatus via the communication network;

a collector configured to collect, via the communication network, inhabitant information of an inhabitant in a region the social infrastructure concerns;

a database configured to accumulate the acquired

infrastructure information and the collected inhabitant information;

a plan creator configured to create the operation plan based on the infrastructure information and the inhabitant information which are accumulated in the database; and

a transmitter configured to transmit the created operation plan to the local apparatus.

21. The server apparatus of claim 20, further comprising a calculator configured to calculate a key performance indicator based on the infrastructure information and the inhabitant information which are accumulated in the database,

wherein the plan creator creates the operation plan based on the calculated key performance indicator.

22. The server apparatus of claim 20, further comprising a converter configured to convert the acquired infrastructure information into an intermediate value comparable between a plurality of different types of social infrastructures,

wherein the plan creator creates the operation plan for each of the plurality of social infrastructures based on the intermediate value.

23. A program to be executed by a computer, the program comprising:

acquiring infrastructure information concerning a social infrastructure from a local apparatus provided

in the social infrastructure;

collecting inhabitant information of an inhabitant in a region the social infrastructure concerns from the local apparatus;

accumulating the acquired infrastructure information and the collected inhabitant information in a database;

creating an operation plan of the social infrastructure based on the infrastructure information and the inhabitant information which are accumulated in the database; and

transmitting the created operation plan to the local apparatus.

24. The program of claim 23, further comprising calculating a key performance indicator based on the infrastructure information and the inhabitant information which are accumulated in the database,

wherein in the creating, the operation plan is created based on the calculated key performance indicator.

25. The program of claim 23, further comprising converting the acquired infrastructure information into an intermediate value comparable between a plurality of different types of social infrastructures,

wherein in the creating, the operation plan for each of the plurality of social infrastructures is created based on the intermediate value.